

## Curriculum Vitae



### **Dr Cheng Zhuoyuan**

Head, Building & Project Management and Graduate Diploma in Project Management

School of Science and Technology

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### **Education Qualifications**

2015                      Doctor of Philosophy, Nanyang Technological University  
2011                      B.Eng (Civil), Nanyang Technological University

### **Academic and Professional Experience**

2023 – Present        Senior Lecturer, School of Science and Technology, Singapore University of Social Sciences, Singapore  
2020 – 2022            Lecturer, School of Science and Technology, Singapore University of Social Sciences, Singapore

### **Memberships and Professional Activities**

- Member, GeoSS
- Member, IES
- Technical Committee on Civil and Geotechnical Works
- SAC Assessor
- Reviewer, Internal Journal of Geotechnical Engineering
- Reviewer, Canadian Geotechnical Journal
- Reviewer, Géotechnique Letters

### **Consultation and Executive Experience**

2015 – 2020            C&S Engineer, Surbana Jurong Consultants Private Limited

### Research Interests

- Soil Dynamics
- Advanced Laboratory and Field Tests
- Numerical Modelling
- Foundation Engineering

### Selected Publications

- Nyunt T.T., Cheng, Z., Anggraini, Z., Koh, P.P. & Chin, K.K., (2022) "Analysis and visualization for pavement condition assessment using network-level survey data", The 9th Symposium on Pavement Surface Characteristics, paper ID 176, Milan, Italy.
- Leong, E. C., & Cheng, Z. (2022). A geometry-modelling method to estimate landslide volume from source area. *Landslides*, 1-15.
- Cheng, Z. and Leong, E.C. (2022). Discussion of "Poisson's Ratio Characteristic Curve of Unsaturated Soils" by Sannith Kumar Thota, Toan Duc Cao, and Farshid Vahedifard (2022), *Journal of Geotechnical and Geoenvironmental Engineering*, 148(6).
- Leong, E. C., & Cheng, Z.Y. (2019). Timoshenko beam effect in flexural resonant column tests. *Soils and Foundations*, 59(1), 234-239.
- Cheng, Z. and Leong, E.C. (2018). Determination of damping ratios for soils using blender element tests. *Soil Dynamics and Earthquake Engineering*, Vol 111: 8-13
- Leong, E. and Cheng, Z. (2016). Effects of Confining Pressure and Degree of Saturation on Wave Velocities of Soils. *International Journal of Geomechanics*, Vol. 16(6)
- Cheng, Z. and Leong E.C. (2016). Finite element simulations of wave propagation in soils using a Viscoelastic model. *Soil Dynamics and Earthquake Engineering*, Vol. 88: 207-214
- Cheng, Z.Y. & Leong, E.C. (2015). Damping characteristics of sand-rubber chip mixtures as a seismic barrier, *Proceedings of the 5th International Conference on Design and Analysis of Protective Structures*, Singapore
- Cheng, Z.Y. & Leong, E.C. (2015). Relationship between water retention, stiffness and damping ratio in soils, *Proceedings of the 12th Australia New Zealand Conference on Geomechanics*, Wellington, New Zealand, pp. 1-8
- Cheng, Z.Y. and Leong, E.C. (2014). A hybrid bender element-ultrasonic system for measurement of wave velocity in Soils. *ASTM Geotechnical Testing Journal*, Vol 37(3): 1-13
- Cheng, Z.Y. & Leong, E.C. (2014). Effect of confining pressure and degree of saturation on damping ratios of sand, *International Conference on Unsaturated Soils: Research & Applications 1*, Sydney, Australia, pp.

227-232

Cheng, Z.Y. & Leong, E.C. (2013). Ultrasonic testing of unsaturated soils, Proceedings of ISSMGE TC-101 Workshop - Multiphysical Testing of Soils and Shales, Lausanne, Switzerland, pp. 105-110

Cheng, Z.Y. & Leong, E.C. (2011). Estimation of P-wave velocities for unsaturated geo-materials, Proceedings of the 5th Asia Pacific Conference on Unsaturated Soils, Pattaya, Thailand, pp. 623-628

### **Awards**

- IES/ISTRUCTE Gold Medal cum Book Prize (2010 - 2011)
- TUCSS Geotechnical Engineering Award (2010 - 2011)
- Lee Kuan Yew Gold Medal Award (2010 - 2011)

*Updated on 18 January 2023*